

Appl. No. 10/563,009
Amdt. Dated July 16, 2009
Reply to Office Action of April 23, 2009

Attorney Docket No. 81844.0048
Customer No. 26021

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A silicon based thin film solar cell, wherein a conductive type silicon based low refractive index layer, a silicon based interface layer, and a back electrode are disposed and contact one another in this order on a backside of a photoelectric conversion layer observed from a light incident side, wherein the silicon based interface layer comprises a crystalline silicon component in the layer.

2. (Original) The silicon based thin film solar cell according to Claim 1, wherein the silicon based low refractive index layer has a refractive index not more than 2.5 at a wavelength of 600 nm.

3. (Previously presented) The silicon based thin film solar cell according to Claim 1, wherein a most abundantly existing constituent element, excluding silicon, in the silicon based low refractive index layer is not less than 25 atomic %.

4. (Currently amended) The silicon based thin film solar cell according to claim 3, wherein the most abundantly existing constituent element, excluding silicon, in the silicon based low refractive index layer is oxygen.

5. (Previously presented) The silicon based thin film solar cell according to Claim 1, wherein the silicon based low refractive index layer has a thickness of not less than 300 angstroms.

Appl. No. 10/563,009
Amdt. Dated July 16, 2009
Reply to Office Action of April 23, 2009

Attorney Docket No. 81844.0048
Customer No. 26021

6. (Previously Presented) The silicon based thin film solar cell according to Claim 1, wherein the silicon based low refractive index layer comprises a crystalline silicon component in the layer.

7. (Previously Presented) The silicon based thin film solar cell according to Claim 1, wherein the silicon based interface layer has a thickness not more than 150 angstroms.

8. (Canceled)

9. (Previously Presented) The silicon based thin film solar cell according to Claim 1, wherein the silicon based low refractive index layer and silicon based interface layer includes the same conductivity type.

10. (New) The silicon based thin film solar cell according to claim 3, wherein the silicon based low refractive index layer has a thickness of not less than 300 angstroms.